



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| | | | | |
|--|-------------|----------------------|---------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/569,495 | 12/04/2006 | Kazuya Hino | 1823-0129PUS1 | 3469 |
| 2292 7590 08/24/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | | |
| EXAMINER BOYER, CHARLES I | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1796 | | | | |
| NOTIFICATION DATE | | DELIVERY MODE | | |
| 08/24/2009 | | ELECTRONIC | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/569,495

Applicant(s)

HINO ET AL.

Examiner

Charles I. Boyer

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

This action is responsive to applicants' amendment and response received April 24, 2009. Claims 1 and 3-7 are currently pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are confusing because they appear to require metallic ions, however, the present specification teaches that these ions may be supplied by those naturally occurring in tap water, i.e. hard water, and may even be supplied from a metal surface being cleaned. This raises the question as to whether the cleaning liquid itself must contain these ions, and it appears that it need not. Applicants can surely appreciate that the absence of these ions broadens the present claims considerably, as surfactants and alkali builders are ubiquitous in detergents, particularly laundry detergents, and phosphonate chelants are extremely common chelants used in the art. The examiner estimates there must be scores, if not hundreds of references, that will anticipate or render obvious the claims at hand.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. All prior art rejections set forth in the previous office action are withdrawn in view of applicants' amendment and response.
3. Claims 1, 3, 4, 6, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki et al, US 5,382,295.

Aoki et al teach an aluminum cleaner comprising 1% sodium carbonate, 0.2% ATMPA, 0.3% sodium heptagluconate, 0.2% surfactant, and the balance water wherein the composition has a pH of 10.5 (col. 5, example 5). As this reference meets all material limitations of the claims at hand, the reference is anticipatory. With respect to metallic ions, as water is added to this composition, and unless it is deionized, will contain metallic ions, such as calcium and magnesium, and as an aluminum surface is being cleaned, metallic ions are supplied in this manner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrat et al, US 4,446,035.

Barrat et al teach cleaning compositions comprising 0.2% citric acid, 0.3% phosphonic acid chelant, 2 millimoles calcium chloride, 29% surfactant, and small amounts of sodium hydroxide for pH adjustment as high as 11 (col. 7, example I). Note that this composition is subject to a 1.2% dilution (col. 7, line 64). Though the amount of surfactant in this example is higher than the amount claimed, note that a broad range of surfactant proportions is taught by the reference (see col. 5). Accordingly, it would have been obvious to one of ordinary skill in the art to use less surfactant with a reasonable expectation of successfully obtaining an effective cleaning composition.

6. Claims 1, 4, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clapperton et al, US 6,177,396.

Clapperton et al teach cleaning compositions comprising 4% phosphonic acid chelant, 0.2% calcium chloride, approximately 30% surfactant, and 3.38% potassium hydroxide wherein the composition has a pH of 10.9 (col. 37, example 22). Note that

these compositions are subject to a 1% dilution to form a wash liquor (col. 25, lines 33-36). Though upon dilution, the amount of KOH in this example is just outside the amount claimed, note that a broad range of builder proportions is taught by the reference (see claim 1). Accordingly, it would have been obvious to one of ordinary skill in the art to use more builder with a reasonable expectation of successfully obtaining an effective cleaning composition.

7. Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miracle et al, US 2006/0089284.

Miracle et al teach cleaning compositions comprising 3% citric acid, 0.2% phosphonic acid chelant, 0.42% magnesium sulfate, 12% surfactant, and 15% sodium carbonate wherein the composition has a pH of 10 and the composition is subject to a 1% dilution (¶¶94, example A). Though the amount of surfactant in this example is slightly higher than the amount claimed, note that a broad range of surfactant proportions is taught by the reference (¶¶47). Accordingly, it would have been obvious to one of ordinary skill in the art to use less surfactant with a reasonable expectation of successfully obtaining an effective cleaning composition.

8. Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykstra et al, US 6,903,060.

Dykstra et al teach cleaning compositions comprising 1.5% citric acid, 0.15% phosphonic acid chelant, 0.35% magnesium sulfate, 12% surfactant, and 21% sodium

carbonate (col. 61, example XVI-A) wherein the composition has a pH of 9.5 and the composition is subject to a 3.5g/L dilution (col. 65, lines 50-54). Phosphonate chelants may be present in amounts as high as 0.55% (col. 61, example XVII-A), and a wide range of proportions of surfactants may be used (see col. 29). Accordingly, it would have been obvious to one of ordinary skill in the art to use less surfactant and more phosphonate chelant with a reasonable expectation of successfully obtaining an effective cleaning composition.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles I. Boyer whose telephone number is 571 272 1311. The examiner can normally be reached on M-Th 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571 272 1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles I Boyer
Primary Examiner
Art Unit 1796

/Charles I Boyer/
Primary Examiner, Art Unit 1796